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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO.       |
|---|-------------|----------------------|----------------------------|------------------------|
| 10/645,376  | 08/21/2003  | James A. Euchner     | F-660                      | 7462                   |
| 7590<br>Pitney Bowes Inc.<br>Intellectual Property and<br>Technology Law Department<br>35 Waterview Drive, P.O. Box 3000<br>Shelton, CT 06484 |             |                      | EXAMINER<br>FUREMAN, JARED |                        |
|   |             |                      | ART UNIT<br>2876           | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>05/30/2007    | DELIVERY MODE<br>PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/645,376             | EUCHNER ET AL.      |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Jared J. Fureman       | 2876                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 12 March 2007.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-28 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 August 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

Receipt is acknowledged of the amendment, filed on 3/12/2007, which has been entered in the file. Claims 1-28 are pending.

***Response to Amendment***

1. The declaration filed on 3/12/2007 under 37 CFR 1.131 has been considered but is ineffective to overcome the Sansone (US 6,574,000 B1) reference.
2. The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the Sansone reference. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897). Applicants state that the invention was made at least by the date of June 3, 2003, which is a date earlier than the effective date of the Sansone patent (see item number 7 on page 2 of the declaration filed on 3/12/2007). However, the effective date of the Sansone patent is not the publication date of June 3, 2003, but rather the filing date of November 22, 1996. MPEP 706.02(f)(1)[R-5] states, "The 35 U.S.C. 102(e) date of a reference that did not result from, nor claim the benefit of, an international application is its earliest effective U.S. filing date, ..." (see MPEP 706.02(f)(1)[R-5] I (b)). Thus, applicants have not established conception of the invention prior to November 22, 2996, which is the effective date of the Sansone reference.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5, 7 and 15-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Leon (US 6,701,304 B2, previously cited).

Leon teaches (re claim 1-5 and 7): an apparatus comprising: reading means (data reader 510 or symbology reader 520, see figure 5 and column 13, lines 19-26) for reading data from an indicia (the human readable indicia, the FIM code, bar code, etc.; see figure 5 and column 13, lines 19-26); detecting means (marking detector 530, see figure 5 and column 13, lines 27-33) for detecting at least one ink physical characteristic data (the use of invisible and/or fluorescent ink, taggants in the ink, and or other features, see column 13, lines 28-33), the detecting means is capable of being used for detecting at least one symbol that includes ink physical characteristic data that is indicative of the physical characteristic of the ink to generate ink characteristic data; processing means (computer 540, see figure 5 and column 13, lines 33-42), coupled to the reading means and to the detecting means (see figure 5), for comparing the data with the ink physical characteristic data (the computer compares the decoded data, the

data read by data reader 510 or symbol reader 520, with the undecoded data, the data produced by marking detector 530, see column 13, lines 40-42); the reading means includes means for decrypting the encrypted data (a bar code can be considered encrypted data, thus, the symbology reader 520 can be considered as means for decrypting encrypted data) (also see figure 5 and column 13, lines 19-53). The claim limitations, "for reading first ink physical characteristic data from an indicia", "for detecting at least one symbol that includes ink physical characteristic data that is indicative of the physical characteristic of the indicia to generate second ink physical characteristic data" and "for comparing the second ink physical characteristic data with the first ink physical characteristic data", as well as the non-structural limitations recited in claims 2-5 and 7, represents functional limitations of the apparatus. Applicants are reminded that functional language does not define the invention over the prior art, when the prior art discloses the claimed structural limitations and is capable of performing the recited function (see MPEP 2114). In this case, Leon teaches an apparatus including reading means, detecting means and processing means, coupled to the reading means and to the detecting means, that are capable of performing the claimed functions. Since Leon teaches the claimed structural limitations and is capable of performing the recited functions, the recited functions fail to define the invention over the apparatus as taught by Leon.

Leon also teaches (re claims 15-21): an apparatus (metering device 150x, see figure 2A and column 4, lines 38-46) comprising: a print element (printer 154, see figure

2A) for applying ink to a substrate to form an indicia (see column 6, lines 28-40); and processing means (processor 210, see figure 2A and column 4, line 46 - column 26) coupled to the print element for causing the print element to print at least one symbol (human-readable indicia, a bar code, etc., see column 6, lines 28-40) on the substrate as part of the indicia. In addition, regarding claims 15-21, it appears as though the claim limitations "for applying ink to a substrate to form an indicia" (see line 2, of claim 15) and "for causing the print element to print at least one symbol as part of the indicia, the at least one symbol including ink physical characteristic data that is indicative of a physical characteristic of the ink." (see lines 3-5, of claim 15), represents functional limitations of the print element and processing means. Applicants are reminded that functional language (as recited in claims 15-21) does not define the invention over the prior art, when the prior art discloses the claimed structural limitations and is capable of performing the recited function (see MPEP 2114). Leon teaches an apparatus comprising a print element and processing means coupled to the print element, that are capable of performing the recited functions. Since Leon teaches the claimed structural limitations and is capable of performing the recited functions, the recited functions fail to define the invention over the apparatus as taught by Leon.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Applicant has provided evidence in this file showing that the invention was owned by, or subject to an obligation of assignment to, the same entity as Sansone at the time this invention was made, or was subject to a joint research agreement at the time this invention was made. However, reference Sansone additionally qualifies as prior art under another subsection of 35 U.S.C. 102, and therefore, is not disqualified as prior art under 35 U.S.C. 103(c).

Applicant may overcome the applied art either by a showing under 37 CFR 1.132 that the invention disclosed therein was derived from the invention of this application, and is therefore, not the invention "by another," or by antedating the applied art under 37 CFR 1.131.

5. Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leon (US 6,701,304, previously cited) in view of Sansone (US 6,574,000, previously cited) and Jones et al (US 2005/0088499 A1, previously cited).

Leon teaches an apparatus (authentication system 500, figure 5) and method comprising: reading means (ZIP reader 510 and symbology reader 520) for reading an indicia (410, 412, 414, 418, 416, figure 4) on a label (indictum 400, figure 4); detecting means (marking detector 530, figure 5) for detecting at least one ink physical characteristic (the use of invisible and/or fluorescent ink, taggants in the ink, etc., see column 13 lines 28-33) of the indicia to generate second ink characteristic data; and processing means (computer 540, figure 5), coupled to the reading means and to the detecting means, for comparing the second ink physical characteristic data with the first data (see column 13, lines 34-42); wherein data is included in the first indicia in encrypted form (a digital signature imprinted on the postage label), and the reading means includes means for decrypting the encrypted first ink characteristic data (see column 13, lines 36-39); wherein the at least one ink characteristic detected by the detecting means includes at least one of: (a) a color of at least a portion of the indicia, (b) a spectral characteristic of the indicia, (c) a visible light absorption characteristic of the indicia, (d) a visible light reflectance characteristic of the indicia, (e) an infra-red absorption characteristic of the indicia, (f) an infra-red luminescence characteristic of the indicia, and (g) a visible luminescence characteristic of the indicia (since the marking detector 530 can detect the use of invisible ink, fluorescent ink, and taggants in the ink, the characteristics detected by the marking detector 530 will include spectral

characteristics, infra-red absorption characteristics, luminescence characteristics, etc.); wherein the detecting means detects respective colors of a plurality of different portions of the indicia (the use of visible, invisible, fluorescent inks suggests respective colors of a plurality of different portions); a print element (printer 154, figure 2A) for applying ink to a substrate to form an indicia; and processing means (processor 210, figure 2A) coupled to the print element for causing the print element to print at least one symbol (see figure 4) as part of the indicia; wherein the indicia includes a plurality of panels (see figure 4); wherein at least two of the panels are of different colors (the use of visible ink, invisible ink, fluorescent ink and taggants in the ink suggests different colors); wherein the processing means causes the print element to print the ink characteristic data in encrypted form (see column 5 lines 15-16) (also see figures 2A, 3-5, column 4 line 38 - column 5 line 25, column 12 line 30 - column 53).

Leon fails to specifically teach reading first ink data from an indicia; the at least one symbol including ink data.

Sansone teaches an apparatus and method comprising: reading means (indicia reader 37, figure 3) for reading first ink data from an indicia (code 22 includes ink characteristic data, such as the type of ink that was used to print indicia 21, see column 4 lines 22-25); the at least one symbol including ink data (the type of ink used to print the indicia 21) (also see figures 2, 3, column 3 line 50 - column 4 line 32, column 5 line 32 - column 6 line 5). Sansone also teaches an apparatus and method comprising: a

print element (not shown, but necessarily present, for printing postal indicia 21 on envelope 12, see figure 2 and column 3 lines 63-65) for applying ink (the ink used to print postal indicia 21) to a substrate (envelope 12) to form an indicia (indicia 21); and processing means (not shown, but necessarily present) coupled to the print element for causing the print element to print at least one symbol (22) as part of the indicia, the at least one symbol including ink data (the type of ink used to print indicia 21, see column 4 lines 22-25) wherein the indicia includes a plurality of panels (as shown in figure 2, indicia 21 includes a plurality of panels) (also see figure 2 and column 3 line 50 - column 4 line 32).

In view of Sansone's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the apparatus and method as taught by Leon, reading first ink physical characteristic data from an indicia; the at least one symbol including ink physical characteristic data that is indicative of a physical characteristic of the ink; in order to allow the reader to easily identify the expected characteristics of the ink(s) for comparison to the detected characteristics, thereby allowing the greater authentication capabilities.

Leon as modified by Sansone fails to specifically teach the ink data being ink physical characteristic data; the at least one symbol including ink physical characteristic data that is indicative of a physical characteristic of the ink; wherein the ink characteristic data is indicative of a color of the ink; the ink characteristic data is

indicative of respective colors of the plurality of panels; wherein at least two of the panels are of different colors; wherein the ink characteristic data is indicative of at least one spectral characteristic of the ink; wherein the ink characteristic data is indicative of at least one luminescence characteristic of the ink.

Jones et al teaches the use of indicia (visually recognizable symbol 80, see figures 10, 11, 13 and 14) to identify ink physical characteristic data (the letter indicates the color of the ink, see paragraph 41); at least one symbol including ink physical characteristic data (the letter indicates the color of the ink, which is a physical characteristic of the ink, see paragraph 41); wherein the ink characteristic data is indicative of a color of the ink (the letter indicates the color of the ink, see paragraph 41); the ink characteristic data is indicative of respective colors of a plurality of colors; wherein the ink characteristic data is indicative of at least one spectral characteristic of the ink (the color of the ink is indicative of a spectral characteristic of the ink, the spectral characteristics of that color); wherein the ink characteristic data is indicative of at least one luminescence characteristic of the ink (the color of the ink is also indicative of at least some luminescent characteristics of that particular color of ink).

In view of Jones et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the apparatus and method as taught by Leon as modified by Sansone, the ink data being ink physical characteristic data; the at least one symbol including ink physical characteristic data that is indicative

of a physical characteristic of the ink; wherein the ink characteristic data is indicative of a color of the ink; the ink characteristic data is indicative of respective colors of the plurality of panels; wherein at least two of the panels are of different colors; wherein the ink characteristic data is indicative of at least one spectral characteristic of the ink; wherein the ink characteristic data is indicative of at least one luminescence characteristic of the ink; in order to use the indicia to directly indicate at least some physical characteristic of the ink, thereby allowing a user to visually determine the physical characteristic of the ink in the event that the indicia is not readable by machine due to dirt or other defects.

#### ***Response to Arguments***

4. Applicant's arguments filed 3/12/2007 have been fully considered but they are not persuasive.

Applicants argue that Leon does not disclose or anticipate detecting means for detecting at least one symbol that includes ink physical characteristic data that is indicative of the physical characteristic of the ink of the indicia to generate second ink characteristic data (as recited in claim 1), or processing means coupled to the print element for causing the print element to print at least one symbol on the substrate as part of the indicia, the at least one symbol including ink physical characteristic data that is indicative of a physical characteristic of the ink (as recited in claim 15) (see page 7 of the amendment filed on 3/12/2007), the examiner respectfully disagrees. The claim limitations that applicants argue Leon fails to teach are recited in claims 1 and 15 as

functional limitations in an apparatus claim. Thus, the question is not whether Leon teaches this function, rather the question is whether the structure taught by Leon is capable of performing the claimed function (see MPEP 2114).

Regarding claim 1, Leon teaches detecting means (marking detector 530) is capable of detecting a symbol that includes ink physical characteristic data that is indicative of the physical characteristic of the ink to generate second ink characteristic data. The marking detector 530 is designed to detect the identifiers and markings printed on the label, the use of invisible and/or fluorescent ink, taggants in the ink, and/or other features described above (see column 13, lines 26-32). The use of invisible and/or fluorescent ink and taggants in the ink can be considered physical characteristics of the ink. Thus, the marking detector 530 can detect these physical characteristics in any identifiers and markings printed using these inks.

Regarding claim 15, Leon teaches a print element (printer 154, see figure 2A) for applying ink to a substrate to form an indicia (see column 6, lines 28-40); and processing means (processor 210, see figure 2A and column 4, line 46 - column 26) coupled to the print element for causing the print element to print at least one symbol (human-readable indicia, a bar code, etc., see column 6, lines 28-40) on the substrate as part of the indicia. The processor 210 and printer 154 are capable of printing at least one symbol on the substrate as part of the indicia, the at least one symbol including ink physical characteristic data that is indicative of a physical characteristic of the ink. Clearly the processor 210 and printer 154 perform the function of printing symbols on the substrate as part of an indicia. The function of the symbol including ink physical

characteristic data does not depend on the structure of the processor 210 or printer 154, but rather the information that is used by the processor 210 and printer 154 to create and print the symbol. Thus, the structure as taught by Leon, is capable of performing the recited functions.

Applicants have not shown why the structure as taught by Leon is not capable of performing applicant's claimed functions. Thus, the functional language does not define the invention over the prior art, because the prior art discloses the claimed structural limitations and is capable of performing the recited function (see MPEP 2114).

As discussed above, applicant's declaration under 37 CFR 1.131 has been considered but is ineffective to overcome the Sansone (US 6,574,000 B1) reference because applicants have not established conception of the invention prior to the date of November 22, 1996, which is the effective date of the Sansone reference.

Jones et al teaches the use of indicia (visually recognizable symbol 80, see figures 10, 11, 13 and 14) to identify ink physical characteristic data (the letter indicates the color of the ink, see paragraph 41); at least one symbol including ink physical characteristic data (the letter indicates the color of the ink, which is a physical characteristic of the ink, see paragraph 41). Thus, the combination of Leon, Sansone and Jones et al teaches/suggests the claimed invention.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (571) 272-2391. The examiner can normally be reached on 8:00 am - 5:30 PM M-T, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Jared J. Fureman*  
Jared J. Fureman  
Primary Examiner  
Art Unit 2876

May 25, 2007